

Curriculum Vitae

Personal details

Name Takács, Gábor
Position Full professor
Institute Department of Theoretical Physics
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Employment

1992-1993 Institute for Theoretical Physics, Eötvös University
Research assistant with scholarship of the Scientific Qualification Committee (TMB),
Hungarian Academy of Sciences
1993-1996 HAS-Eötvös Theoretical Physics research group, Eötvös University
assistant research fellow
1996-1997 HAS-Eötvös Theoretical Physics research group, Eötvös University, Budapest
research fellow
1997-1999 Theory Group of INFN Sezione di Bologna
postdoctoral fellow
1999-2001 Department of Mathematics, King's College London
postdoctoral fellow
2001-2002 Institute for Theoretical Physics, Eötvös University
Magyary Zoltán postdoctoral fellow
2002-2005 Institute for Theoretical Physics, Eötvös University
OTKA postdoctoral fellow
2005-2010 HAS-Eötvös Theoretical Physics research group, Eötvös University
senior research fellow
2010-2012 HAS-Eötvös Theoretical Physics research group, Eötvös University
scientific advisor
2012-2014 Institute of Physics, Budapest University of Technology and Economics
scientific advisor
2012-2017 MTA-BME "Momentum" Statistical Field Theory Research Group
scientific advisor, head of group
2014- Department of Theoretical Physics, Budapest University of Technology and
Economics
full professor
2017- BME "Momentum" Statistical Field Theory Research Group
head of group

Education

1983-1987 Katona József Gimnázium, Kecskemét (secondary grammar school)
National Secondary School Competition (OKTV)
mathematics: 9th (1986), 3rd (1987)
chemistry: 10th (1987)
International Chemistry Olympiade, 1987: silver medal
1987-1992 Eötvös University, Budapest,
Faculty of Sciences, M.Sc. course in physics
1991-1992 Republican Scholarship of Hungarian Republic
1992 Diploma (M.Sc.) in physics with distinction

- Diploma work topic: Conformal Field Theory
 Supervisor: Prof. Zalán Horváth, Institute for Theoretical Physics
 Thesis: "Investigation of classical A_2 Toda field theory"
- 1992-1993 Scholarship of the Scientific Qualification Committee (TMB),
 Hungarian Academy of Sciences
- 1993-1995 Ph.D. student and research assistant, Eötvös University,
 Institute for Theoretical Physics
 Research topic: Two Dimensional Integrable Field Theories
 Supervisor: Prof. Zalán Horváth
- 1994-1996 Member of Bolyai College, Eötvös University
- 1995-1996 Visiting research student at
 Dept. of Applied Mathematics and Theoretical Physics (DAMTP)
 University of Cambridge, Cambridge, UK
 Member of Darwin College
 Supervisor: Dr. G. M. T. Watts (until March, 1996),
 Dr. J. M. Evans (from March, 1996)
- 1996 Research topic: Integrable and Conformal Field Theories
 Certificate of Proficiency in English, grade "A"

Academic degrees

- 1996 Ph.D. from Eötvös University with the result "Summa cum laude"
 Thesis: "Free field representation for the form factors of the $O(3)$ nonlinear sigma model and its generalizations"
- 2005 Habilitation (dr. habil) from Eötvös University
- 2008 Doctor of the Hungarian Academy of Sciences (DSc)
 DSc thesis: "Finite size effects in quantum field theory"

Scholarships, fellowships and prizes

- 1995-1996 Scholarship of the Cambridge Overseas Trust
- 1997-1999 INFN postdoctoral fellowship
 Theory Group of INFN Sezione di Bologna
- 1999-2001 PPARC postdoctoral fellowship
 Department of Mathematics, King's College London
- 2001-2002 Magyary Zoltán postdoctoral fellowship, Foundation for Hungarian Higher Education and Research,
 Hungarian Ministry of Education Eötvös University, Institute for Theoretical Physics
- 2002-2005 Széchenyi István scholarship, Hungarian Ministry of Education
- 2002-2005 OTKA postdoctoral fellowship
 Eötvös University, Institute for Theoretical Physics
- 2003 Academy Prize for Young Researchers, Hungarian Academy of Sciences
- 2005-2008 Bolyai János research scholarship, Hungarian Academy of Sciences
- 2008 Novobáztzy prize, Eötvös Loránd Physical Society
- 2017 BME's most significant scientific publication 2016
 M. Kormos, M. Collura, G. Takács and P. Calabrese,
Nature Physics **13**: pp. 246-249 (2017, online advanced publication: 2016)
- 2018 BME's most outstanding scientific publication 2013-2017
 B. Pozsgay, M. Mestyán, M.A. Werner, M. Kormos, G. Zaránd and G. Takács,
Physical Review Letters **113**:(11) Paper 117203 (2014)
- 2020 Academy Prize, Hungarian Academy of Sciences
- 2022 BME's most outstanding scientific publication 2017-2022
 M. Kormos, M. Collura, G. Takács and P. Calabrese,
Nature Physics **13**: pp. 246-249 (2017)

Membership and roles in professional organizations

2000-	Eötvös Loránd Physics Society
2001-2004	Chairman of the Particle Physics Section of the Eötvös Loránd Physics Society
2004-2007	Secretary of the Particle Physics Section of the Eötvös Loránd Physics Society
2006-2010	Physics panel of the Hungarian Scientific Research Fund
2008-2009	Council of Research Units of the Hungarian Academy of Sciences
2008-2010	Council of the Research Network of the Hungarian Academy of Sciences
2008-2011	Secretary of the Committee on Particle Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2008-2010	Young Researchers' Council of the Hungarian Academy of Sciences
	Coordinator of the physical sciences section
2011-2014	Chairman of the Committee on Particle Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2014-2017	Deputy chairman of the Committee on Particle Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2014-	Supervisory Committee of Bolyai College Foundation
2017-	Member of the Committee on Statistical Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2018-	Editorial Board of Fizikai Szemle (monthly journal of Eötvös Loránd Physics Society)
2021-2024	Member of the Council of Mathematics, Physics, Chemistry, and Engineering, National Research, Development and Innovation Office
2023-	Chairman of the Committee on Statistical Physics, Section of Physical Sciences, Hungarian Academy of Sciences
2023-	Member of the Science Ethics Committee, Hungarian Academy of Sciences

University organisation: roles and responsibilities

2014-	ELTE Physics Habilitation Committee
2014-	BME Physics Doctoral School Council
2014-	BME Physics Habilitation and Doctoral Council
2014-	BME Faculty of Science Council
2015-2022	Secretary of BME Physics Education Committee
2015-2020	Deputy director (education), BME Institute of Physics
2017-	ELTE Faculty of Science Habilitation Council
2020-2024	Head of BME Physics Doctoral School
2020-	Chairman of BME Physics Habilitation and Doctoral Council
2023-2024	Deputy director, BME Institute of Physics
2023-	Deputy Chairman of BME University Habilitation and Doctoral Council
2024-	Director, BME Institute of Physics

Other professional activities

2003-2009	Tutor of the physics section of Bolyai College
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Grants (as principal investigator)

2001-2003	FKFP 0043/2001 research grant <i>Integrable and conformal field theories, dynamical symmetries and their applications</i>
2002-2005	OTKA D42209 postdoctoral grant <i>Nonperturbative investigation of two-dimensional quantum field theories</i>
2008	NKTH Apponyi Albert (Mecenatúra) grant BOMMRG08 <i>Organization of "Renormalization Group" Bolyai intensive course</i>
2008-2012	OTKA K75172 research grant

2012-2017	<i>Correlation functions and finite size effects in two-dimensional quantum field theories</i> LP2012-50/2012 "Momentum" grant of the Hungarian Academy of Sciences <i>Statistical Field Theory in Condensed Matter</i> (MTA-BME "Momentum" Statistical Field Theory Research Group)
2013-2015	FP7-PEOPLE-2012-IIF (Marie Curie) grant Project number 330076 " <i>Quantum Quench</i> " Role: scientist-in-charge, fellow: Márton Kormos
2013-2015	MTA-CNR Mobility Grant SNK-84/2013
2014-2016	MTA Postdoctoral Grant Role: supervisor, fellow: Tamás Pálmai
2016-2020	NKFIH K2016 grant no. 119204 <i>Dynamics of Strongly Correlated Quantum Systems</i>
2022-2026	NKFIH ANN2022 grant no. 138606 <i>Realising and probing quantum fields with ultra-cold atoms (QuFT-Lab)</i>

Organization of schools and conferences

International conferences and schools

2003	EUCLID 2003 Summer School on <i>Nonperturbative methods in low dimensional integrable models</i> Organizer
2004	6th Bologna Workshop on <i>CFT and Integrable Models</i> Member of Scientific Board
2006	7th Bologna Workshop on <i>CFT and Integrable Models</i> Member of Scientific Board
2008	Bolyai Intensive Course on <i>Renormalization Group Methods in Physics</i> Principal organizer
2010	ESF INSTANS Workshop on <i>Time-dependent dynamics and non-equilibrium quantum systems</i> Organizer
2011	35th Johns Hopkins Workshop on <i>AdS/CFT and its Applications</i> Organizer
2012	Zalán Horváth Memorial Workshop Organizer
2014	Workshop on <i>Finite-size Technology in Low Dimensional Quantum Systems</i> (VII) + Conference on <i>Integrability in Low Dimensional Quantum Systems</i> Organizer
2014	9th Bologna Workshop on CFT and Integrable Models Member of Scientific Board
2023	10th Bologna Workshop on CFT and Integrable Models Member of Scientific Board

Organizer of Hungarian Summer Schools on Theoretical Physics

1997	Nonperturbative results in supersymmetric gauge theories
2002	New developments in gauge theories, gravitation and strings
2004	Cosmology
2005	QCD 2005
2006	Experiments and Einstein's theory of gravitation
2007	Physics at the LHC